CMS ECAL 3KW power Supply
Pre-production Run
Vendor Interview
J. Green
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During the week of October 25-29, 2004 a series of interviews were arranged with six electronics assembly vendors from the Greater Chicago Land area. The vendors invited included those researched from the Internet, from previous experience and recommendations from the Fermilab purchasing department. The purpose of the visit was to encourage vendors to participate in the bidding to assemble 10 pre-production ECAL power supplies, to evaluate their interest in the project and to expose the vendors to the prototype units to enable them to submit a bid that reflected knowledge of the detail required to build the units . Each vendor was interviewed by me to get background information then later by Dave Huffman and Walt Jaskierny. Dave orientated the vendor about the intricacies of the ECAL power supply. The vendors were allowed to take pictures and to ask any questions.

I told each vendor that Fermilab was supplying all parts and hardware needed to fully assemble 10 units.

Each vendor was made aware that this build was a pre-production for expected second and third stage procurement.

The anticipated production schedule was outlined as follows:

- Purchase order to assembler by mid November 2004
- Parts kits to assembler by mid December 2004
- Assembler to deliver 1<sup>st</sup> article to Fermilab for evaluation and critique by mid January 2005.
- Fermilab to test and return 1<sup>st</sup> article as a golden sample by the end of January 2005.
- Assembler to complete the assembly of the remaining 9 units by the end of February 2005.
- Second stage for 40 Units by the end of summer 2005
- Third stage by summer 2006

Questions were developed to help evaluate which vendor might have the best expertise to assemble the ECAL pre-production prototypes. At some later date when the quotes are received we can use these interviews to help decide the vendor of our choice. Vendor responses to the questions are available in a separate document.

## Questions to the Vendors

- 1. Do you have ISO-9xxx certification?
- 2. Are you familiar with European standards such as IEC, TUV, CE, VDE and etc.?
- 3. Do you have any experience with assembling a unit like this one?
- 4. Do you foresee any problems with assembling a unit that weighs 110lbs?
- 5. How will you design or manage the wiring of the controls, monitoring and power wiring?
- 6. Are you capable of manufacturing and or managing the fabrication of the mechanical assembly parts?
- 7. For the 10 units would you prefer to deliver all the units at once or would you want to deliver them a few at a time similar to pipelining?
- 8. What would you say are the hazards of this assembly?
- 9. What do you require for spare count or percentage?
- 10. What testing can you perform on this power supply? (230vac @ 400hz, 3 phase input).
- 11. We are using halogen-free materials in the assembly, are their any concerns?
- 12. What will you use to label the wiring?
- 13. All hardware is metric will this present a problem with tooling?
- 14. What tooling will you need to buy in order to fabricate the unit?
- 15. How many of these units could you produce in a week?
- 16. How flexible are you when asked to make engineering changes?

## Vendors Selected:

Essex Electro engineering 2015 Mitchell Blvd. Schaumburg, IL 60193 847/891-4444 Fax 847/891-9111

Contact: Glenn Pawlowski x103

The Phoenix Company of Chicago, Inc. 555 Pond Drive Wood Dale, IL 60191 Phone: 800-323-9562

Contact: Allen Peterson

Fax: 630-595-6579

Pantrol Inc 1510 Chestnut Street Ottawa, IL 61350 (815) 434-7500

Contact: Chet or John (Butch) Burns at 815-228-1660

Sterling Controls, Inc. 12923 Lawrence Road P.O. Box 418 Sterling, IL 61081 815-625-3103 fax 800-243-5493 toll-free 815-625-0852 (outside the USA) Contact: Don Goshert

Russell J. Landsly Regional Sales Manager Prater - Sterling 2 Sammons Court Bolingbrook, IL 60440 Tel: 630.759.9595 Direct: 630.679.3236 Manutec 415 West Belden Ave. Addison II. 60101 630-543-3022 fax 630-543-7766 Dick Zibora or Randy Flones

Electronic Manufacturers Inc 201 eastern Ave Bensenville IL 60106 630.227.9200 fax 630.227.9244 630.227.9201 President Lee Harris Sales Mgr. Oliver Goold 630.464.4930